

REMARKS

Claims 1-6 (as amended) are pending. No new matter has been introduced.

Claim Objections

Claim 6 is objected to for the reasons noted at page 2 of the Office Action. In particular, claim 6 is objected to for not reciting proper multiple dependent claim format. In response, Applicant has amended the term "according to claims 1 to 5" to the term "according to any one of claims 1 to 5" to recite proper multiple dependent claim format. (Emphasis added.)

In view of the above, Applicant respectfully requests reconsideration and withdrawal of the objection to claim 6 for the reasons noted at page 2 of the Office Action.

Applicant notes that claim 6 has not been examined on its merits as acknowledged by the Examiner at page 2, paragraph 3, of the Office Action.

Anticipation Rejection of Claims 1-4 under 35 USC § 102(b)

Claims 1-4 are rejected under 35 USC § 102(b) as being anticipated by U.S. Pub. No. 2002/0142133 A1 to Matsunaga et al. (hereinafter "Matsunaga") for the reasons noted at pages 2-3 of the Office Action. Applicant respectfully traverses this rejection for the reasons noted below.

In particular, Applicant respectfully directs the Examiner's attention to the text in Applicant's specification originally filed stating that the (as amended) claimed invention (i.e., "a light diffusion plate" as recited in the **Listing of the Claims** section of this paper) is directed to be used as "a light diffusion plate for a direct type backlight device" as noted in relevant part below:

The light diffusion plate is used for transmitting and scattering light; erasing a so-called lamp image that is a phenomenon that a shape of the linear light source, particularly its linear outline is shown through; and decreasing and uniformizing irregularity in brightness on the screen. [(Specification originally filed at page 3, lines 6-11; emphasis added.)]

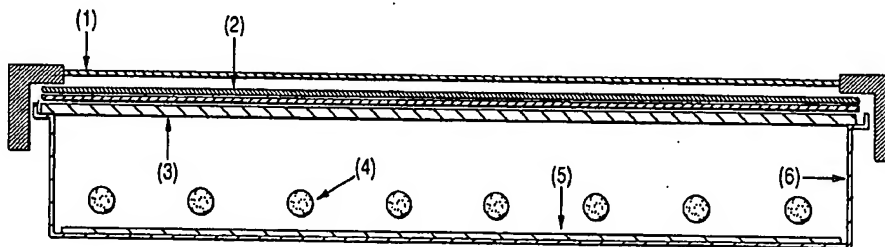
* * *

Fig. 1 is a drawing showing a direct type backlight device using a light diffusion plate of this invention.

In the drawing, reference number 1 denotes a liquid crystal panel, 2 denotes an optical film, **3 denotes a light diffusion plate**, 4 denotes a linear light source (cold cathode tube), 5 denotes a reflection plate, and 6 denotes a housing. [(Specification originally filed from page 6, line 20 to page 7, line 1; emphasis added.)]

The foregoing elements are depicted in Applicant's Fig. 1 showing a non-limiting example of a "direct type backlight device" having a "light diffusion plate" of numeral 3 as illustrated below:

FIG. 1



From the foregoing, it is clear that the claimed "light diffusion plate" is for use in a "direct type backlight device" as illustrated in the non-limiting example of Fig. 1 of Applicant's specification originally filed.

In contrast, Matsunaga explains that the optical layer described therein is for its anti-glare properties to diffuse glare from indoor lighting such as fluorescent lighting, to diffuse glare from sunlight from windows or to diffuse glare from a shadow that aggravates visibility. In that regard, Matsunaga states in relevant part:

Conventionally, in picture display, such as LCD, incidence from an indoor lighting, such as a fluorescent light, or sunlight from windows, or a reflection of operator's shadow etc. given to a display unit surface sometimes aggravates visibility of pictures. [(Matsunaga at page 1, ¶ 0004, lines 1-5 thereof; emphasis added.)]

To reduce the glare resulting from outside incident light impinging on an LCD screen, Matsunaga provides an anti-glare surface on the LCD surface:

Therefore an optical diffusing layer is provided, on [the] LCD surface, in which fine concavo-convex structure is formed in order to diffuse a surface reflected light, **to suppress a regular reflection of outdoor daylight and to prevent a reflection of outside environment** (having antiglare property), for the purpose of improvement in the visibility of pictures. [(Matsunaga at page 1, ¶ 0004, lines 6-12 thereof; emphasis added.)]

In other words, Matsunaga describes an anti-glare optical diffusing layer intended “to suppress a regular reflection of outdoor daylight and to prevent a reflection of outside environment” as noted above. (Emphasis added.) In fact, Matsunaga further comments that his LCD device already equipped with its anti-glare layer (intended to suppress outdoor/outside light) can be further equipped with an “optical diffusing plate” together with a “backlight” as noted in relevant part below:

Furthermore, **in assembling a liquid crystal display**, suitable parts, such as diffusion plate, **anti-glare layer**, antireflection film, protective plate, prism array, lens array sheet, **optical diffusing plate**, and **backlight**, may be installed in suitable position in one layer or two or more layers. [(Matsunaga at page 7, ¶ 0067, lines 9-14 thereof; emphasis added.)]

Because Matsunaga describes his anti-glare layer attached to the LCD surface to diffuse outdoor/outside light and further separately describes incorporating an “optical diffusion plate” and “backlight” (i.e., in addition to Matsunaga’s anti-glare layer), it is absolutely clear that Matsunaga’s anti-glare layer itself cannot be one and the same as Matsunaga’s “optical diffusion plate” or Applicant’s claimed “light diffusion plate.” If Matsunaga’s anti-glare layer and Matsunaga’s “optical diffusion plate” were one and the same (which they are not), they would not have been described as separate elements with different functions used in assembling Matsunaga’s LCD as quoted above. Thus, to reiterate, Matsunaga’s anti-glare layer cannot be one and the same as Applicant’s “light diffusion plate” recited in Applicant’s rejected claims. (Emphasis added.)

To emphasize that point, Applicant has amended the rejected claims to change the term "light diffusion plate" to the term a "light diffusion plate for a direct type backlight device" in the preamble of claim 1. (Emphasis added.) Also, likewise, the body of claim 1 now recites the term "the light diffusion plate for the direct type backlight device" as noted in the **Listing of the Claims** section of this paper. (Emphasis added.) Similar claim amendments are introduced into dependent claims 2-6.

Support for the foregoing claim amendments is found in the specification, for example, from page 6, line 20 to page 7, line 1 and elsewhere. The supporting language in the paragraph bridging pages 6-7 of Applicant's specification originally filed is reproduced above together with Applicant's Fig. 1. Applicant respectfully directs the Examiner's attention to the same.

In view of the foregoing, Applicant respectfully submits that Applicant's claimed invention directed to a "light diffusion plate for a direct type backlight device" is an entirely different claimed invention from the anti-glare layer of Matsunaga for reducing glare from outdoor or outside light as the Matsunaga reference itself acknowledges. By Matsunaga describing that the Matsunaga device with its anti-glare layer (for reducing glare from outdoor/outside light) may be further equipped with an "optical diffusion plate" and "backlight", Matsunaga clearly conveys to one of ordinary skill in the art that the anti-glare layer of Matsunaga cannot be an "optical diffusion plate" and "backlight" or cannot be Applicant's claimed "light diffusion plate for a direct type backlight device" – contrary to the assertion in the Office Action. (Emphasis added.) Accordingly, the anti-glare layer of Matsunaga is not the same as Applicant's claimed "light diffusion plate for a direct type backlight device" as recited in the rejected claim (as amended). (Emphasis added.)

In view of the foregoing, Applicant respectfully submits that Matsunaga fails to disclose or describe Applicant's claimed "light diffusion plate for a direct type backlight device" as recited in the **Listing of the Claims** section of this paper. (Emphasis added.)

For at least these reasons, Applicant respectfully submits that Matsunaga fails to anticipate Applicant's claimed invention (as amended) directed to "a light diffusion plate for a direct type backlight device" as noted. (Emphasis added.) Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1-4 under 35 USC § 102(b) over Matsunaga.

Obviousness Rejection Under 35 USC § 103(a)

Claim 5 has been rejected under 35 USC § 103(a) as being obvious in view of Matsunaga for the reasons noted at pages 4-5 of the Office Action. In particular, the Office Action asserts at page 4, paragraph 9, lines 6-7 that claim 5 recites a "thickness of the coating resin layer being 20 to 200 μm ." The Office Action further asserts that it would have been obvious to change the 3-6 μm thickness of Matsunaga to the 20-200 μm recited in Applicant's rejected claim 5:

[I]t would have been . . . obvious to one having ordinary skill . . . to have modified the thickness of the resin coated layer to be between 20 to 200 μm , since such a modification would have involved a mere change in the size of a component. [(Office Action at page 4, paragraph 9, lines 8-10 thereof; emphasis added.)]

Applicant respectfully disagrees with the assertion that a change to 20 to 200 μm would have been "a mere change in the size of a component" because the change in size would have unpredictable and quite likely undesirable effects. (Emphasis added.) To illustrate that very point, Applicant respectfully directs the Examiner's attention to Table 1 of Matsunaga reproduced below:

TABLE 1

| | Sm (μm) | Rz (μm) | Ra (μm) | Rz/Ra | 60 glossiness (%) | Glare |
|--------------------------|-------------------------|-------------------------|-------------------------|-------|----------------------|-------|
| Example 1 | 60.0 | 1.28 | 0.15 | 8.57 | 60.0 | ⊙ |
| Example 2 | 48.9 | 0.86 | 0.12 | 7.16 | 58.4 | ⊙ |
| Example 3 | 35.0 | 1.56 | 0.24 | 6.50 | 30.0 | ○ |
| Example 4 | 51.7 | 1.56 | 0.22 | 7.09 | 35.6 | ○ |
| Comparative Example 1 | 47.7 | 2.62 | 0.34 | 7.71 | 52.0 | × |
| Comparative Example 2 | 37.4 | 1.74 | 0.28 | 6.21 | 25.8 | × |
| Comparative Example 3 | 54.2 | 1.48 | 0.16 | 9.25 | 42.0 | × |

(Glare)

⊙ no glare

○ a little glare

Δ a little glare with practically no problem

× glare

What is noted from Table 1 (reproduced above) of Matsunaga is that Comparative Examples 1, 2 and 3 marked with the symbol "x" produce "glare", that Examples 1-2 do not produce glare (denoted by the circle within a circle symbol) and that Examples 3-4 marked with the symbol "O" produce some glare ("a little glare"). It is further noted that the thickness of the resin layer of Examples 1, 2 and 4 is 4 μ m ("no glare") and that of the resin layer of Example 3 is 3 μ m ("a little glare"). However, the thickness of the resin layer of Comparative Example 1 is 4 μ m contributing to "glare" and the thickness of the resin layer of Comparative Examples 2 and 3 is 2.5 μ m which also produces "glare".

Thus, it appears that even a small change (e.g., 4 μ m down to 2.5 μ m) in thickness leads to "glare" which is clearly undesirable according to Matsunaga. In that context, making a 6x (20/3) to a 60x (200/3) change from the 3-6 μ m thickness described in Matsunaga all the way up to 20 μ m to 200 μ m thickness recited in rejected claim 5 is certainly NOT "a mere change in the size of a component" because based on the data in Table 1 of Matsunaga even a small change in thickness can lead to undesirable anti-glare properties. (Emphasis added.)

Moreover, as already noted in the context of the 35 U.S.C. § 102(b) anticipation rejection above, Matsunaga is directed to forming an anti-glare layer to reduce glare from outdoor/outside light and not directed to a "light diffusion plate for a direct type backlight device" as recited in the claims (as amended). (Emphasis added.) Thus, Applicant's prior comments and remarks regarding the deficiencies of the Matsunaga reference (relating to the asserted anticipation rejection under 35 U.S.C. § 102(b)) are incorporated herein by reference in their entirety and equally applied to the present obviousness rejection without having to repeat the same.

Further, in view of the foregoing, Matsunaga is non-analogous art because Matsunaga is directed to describing an anti-glare surface for reducing glare from outdoor/outside light and is not concerned with a "light diffusion plate for a direct type backlight device" as recited in Applicant's claims (as amended). (Emphasis added.)

For at least these reasons, Applicant respectfully submits that claim 5 is not obvious in view of the disclosure of Matsunaga. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of the claim 5 under 35 USC § 103(a) in view of the disclosure of Matsunaga.

Conclusion

In view of the foregoing, the Applicant respectfully submits that this application is in condition for allowance. A written indication of the same is respectfully requested.

If the Examiner believes that personal communication with the undersigned attorney will expedite prosecution of this application, the Examiner is invited to contact the undersigned at the number indicated.

No fees are believed to be due. However, if any fees are required or an overpayment of fees made, please debit or credit our Deposit Account No. 19-3935, as needed.

Respectfully submitted,
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